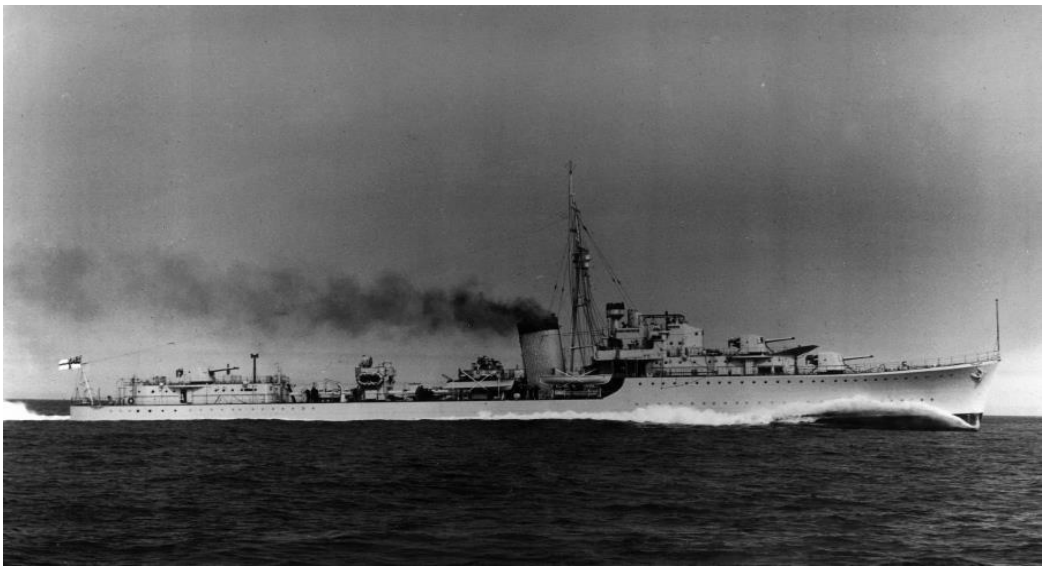
BOLDON CAMP HERITAGE GROUP

HMS Kelly
Combat, Damage and Repair – May 1940

Motto: “Keep on instead of Hold on”



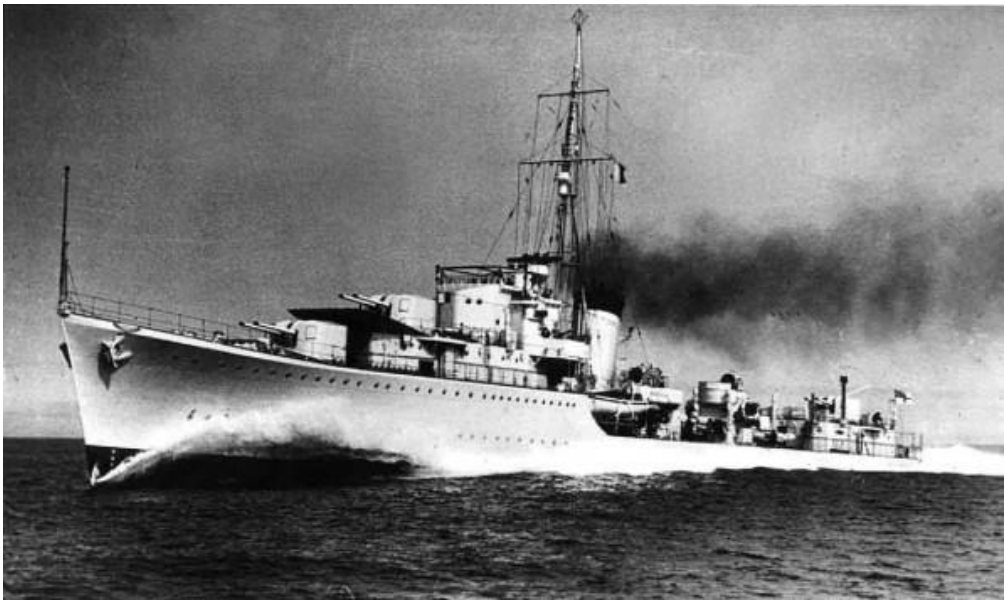
Technical Details

Ship Class **K-class Destroyer**
Hull Number F01
Builder Name Hawthorn Leslie & Co., Hebburn, England, United Kingdom
Laid Down 26 Aug 1937 ***Launched*** 25 Oct 1938 ***Commissioned*** 23 Aug 1939 ***Fate*** Sunk 23 May 1941
Displacement 1,760 tons standard; 2,330 tons full
Dimensions 356 ft. x 35 ft. x 12 ft.
Machinery 2 Admiralty 3-drum water-tube boilers driving Parsons geared steam turbines with 2 shafts
Power Output 40,000 SHP
Speed 36 knots

Range 1,050nm at 32 knots
Crew 218
Armament
3x2x4.7in Mk XII QF guns, 1x4x40mm AA pom-pom, 2x4x0.50in AA machine guns, 10x21in Mk IX torpedo tubes, 20 depth charges
Other Ships in Class and Pennant Numbers
F28 Kandahar, F12 Kashmir (ex Javelin), F37 Kelvin, F45 Khartoum, F50 Kimberley, F64 Kingston, F91 Kipling

Construction

Designed by A.P.Cole/RCNC the "K" Class destroyers were the follow-on class to the "J" Class (1936 Programme) and followed the introduction of the "Tribal" Class destroyers which were designed to fulfil a definite function, being somewhat larger vessels built to work in conjunction with cruisers and give support to the normal fleet destroyer types. Consequently, the "J/K" classes reverted to a fleet destroyer role which required a heavy torpedo armament, a good gun armament for both surface and anti-aircraft action.
The design of the class included a return to a two boiler room single funnel arrangement which allowed for a reduction in weight, space, cost and personnel for machinery. It also provided an increased safety margin owing to the reduced flooded length if the engine room and adjacent boiler room were bilged.
The class also introduced longitudinal framing in destroyers for the first time (apart from the experimental Amazon of 1926) which was strongly opposed by the builders, especially the Clydeside yards as it supposedly increased costs and building times. So strongly were the Clydeside builders against longitudinal framing that they sent a delegation to the Admiralty Controller demanding that he dismiss A.P.Cole. (The real reason they were against the new design was essentially reluctance to change accepted practice reinforced by conservative management). In the event, there was little real difference in building times and the true costs were concealed in the excessive profits of the era. The true value of longitudinal framing was proved by ships like the Kelly, which undoubtedly would have broken her back and sunk if she had been transverse frame built as the older destroyers were.
During the design of the "J" class, Lord Mountbatten apparently was a frequent visitor to the RCNC design section under A.P.Cole during which he discussed all aspects of the design with the design team, including, crucially, possible consequences of battle damage and remedial action to be taken in this event.



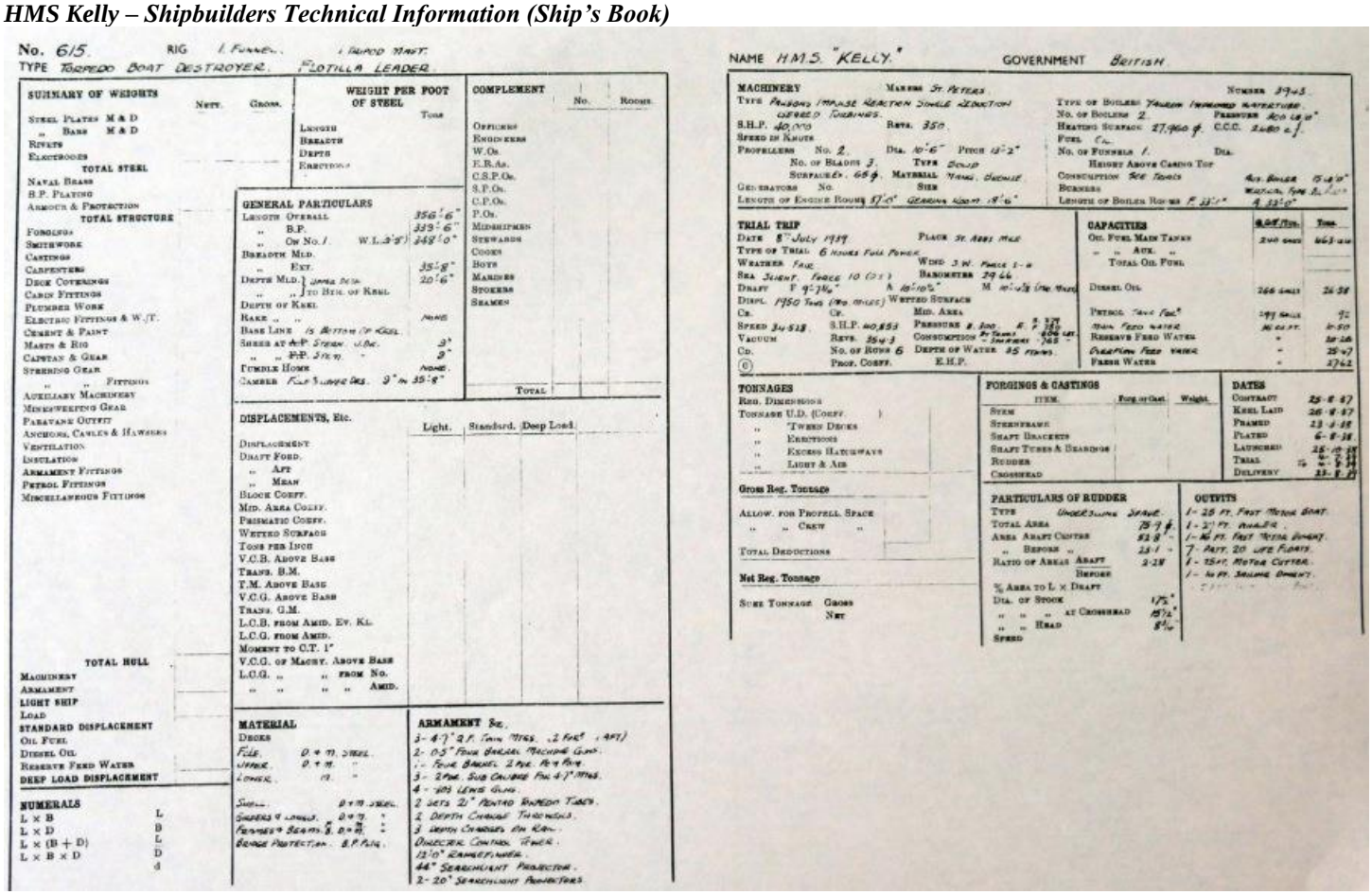
HMS Kelly on acceptance trials, running at high speed.

The Shipbuilder

The shipbuilding firm responsible for producing the Kelly, together with the Jervis, lead ship of the "J" Class, was R&W Hawthorn, Leslie and Company of Hebburn, a shipbuilder, ship repairer and manufacturer of marine propulsion plant (triple expansion engines and steam turbines). The firm specialised in passenger and cargo liners, refrigerated dry cargo and ore carrying vessels, oil tankers.

Usually referred to as Hawthorn Leslie, the firm was originally founded in 1886 on Tyneside by a merger between R&W Hawthorn and Co. of St Peters, Newcastle and A.Leslie and Co. of Hebburn, Hawthorns being a locomotive manufacturer and Leslie a shipbuilder.
Hawthorn was originally formed by Robert Hawthorn in January 1817 at Forth Banks, Newcastle for the manufacture of stationary steam engines and mill-work. Robert was joined by his brother William shortly after the firm was founded.
A.Leslie and Co. was founded in 1850 in Aberdeen before moving to Tyneside in 1854. Only three shipbuilding yards existed on the Tyne at the time and Leslie effectively built Hebburn by erecting houses for his workers. Leslie retired in 1885, after being responsible for building over 200 ships, and his firm merged with R&W Hawthorn the following year.
The firm continued to expand up to the Great War, producing its first destroyer, the Opossum of the "A" Class in 1895 together with the first propulsion turbine powered destroyer, HMS Viper in 1899. During the Great War the company further expanded producing twenty five destroyers of various classes, together with several "C" Class light cruisers, other naval and merchant vessels together with a wide variety of locomotives. After the War the company contracted somewhat due to the overall economic situation but was still involved in building ships, both naval and merchant, providing marine propulsion equipment to other shipbuilders and continuing to produce locomotives. HMS Sussex, an 8" gun heavy cruiser of the "London" Class was built in 1928 followed by the Manchester, a 6" gun cruiser of the "Southampton" Class in 1937 together with two ships of the "Dido" Class 5.25" cruisers before the outbreak of the Second World War. A total of ten destroyers, including the Kelly, and three escort sloops were built in the inter war period.
The company sold its locomotive manufacturing interests to Robert Stephenson and Co. in 1937 and henceforth concentrated on shipbuilding, ship repairing and marine propulsion manufacturing prior to the start of the Second World War.

HMS Kelly – Shipbuilders Technical Information (Ship's Book)



HMS Kelly – Operational Career to May 1940

Commissioned on 23 August 1939, HMS Kelly was captained by Lord Louis Mountbatten who was, himself, Captain (D) of the Fifth Destroyer Flotilla. Kelly entered the Second World War in home waters on routine patrols in the North Sea and convoy escort duties.

On 14 December 1939 the Kelly struck a mine while escorting rescue tugs going to the aid of two tankers reported to be in trouble off the Tyne. Unable to move, HMS Mohawk took the crippled Kelly in tow until a tug arrived to tow her back to Hawthorn Leslie's yard for repair. She was out of service for three months.

On completion of the repairs the Kelly returned to her duties but on a snowy night, 9 March 1940 while escorting a northbound Norwegian convoy she was in collision with HMS Gurkha escorting a southbound convoy. Immediately Kelly's signalman made "Have been hit by mine or torpedo. Am uncertain which". Gurkha's answering signal came in clearly "That was me, not mine"! The damage to the Kelly was sufficient to put her back in dry dock for a further period of repairs.

On 1 May 1940, HMS Kelly was part of the destroyer force escorting the transports sent to evacuate Allied troops from Namsos, Norway. As the naval force approached the Norwegian coast during the afternoon a thick fog came down forcing Vice-Admiral John Cunningham to order a turn to seawards. One of his destroyer screen, HMS Maori (Commander G. N. Brewer RN), failing to take in the signal, continued on and was able to establish her position off the Kya Light. Captain Mountbatten, proposed that he should take two other destroyers, join the Maori and try to make their way into Namsos where they might be able to take off at least some of the scheduled first night load.

The proposal was approved. The Kelly duly made contact with the Maori and the four ships groped their way up the Namsen Fjord to break out into clear weather off Namsos. By then it was broad daylight, and already the first Stuka dive bombers of *I Gruppe Stukageschwader I* were circling above and seeking more worthwhile targets than the shattered town. As there was no possibility of embarking troops under their threat, Mountbatten led the ships back into the fog. It was none too soon, for before Maori was able to get into complete cover, and while her masts were still showing above the low-lying fog bank, a Stuka placed a bomb so close to her that she suffered twenty-three casualties from splinters. That night Captain Philip Vian in HMS Afridi followed by the cruiser HMS York, the destroyer HMS Nubian and three transports came up the fjord where they were joined by Mountbatten's four destroyers. The Kelly was the first to get alongside the stone pier where 270 French soldiers quickly boarded. At 1:00 am, in company with the transport El Kantara containing 1700 troops, Kelly sailed back down the fjord followed by the York and the Nubian. Finally at 3:15 am the last troops of the rear guard – the Colonel and thirty-three men of the York and Lancaster Regiment boarded the Afridi bringing the campaign in Central Norway to an end.

On 9 May 1940 Kelly, together with destroyers HMS Kandahar, HMS Kimberley and HMS Hasty, was escorting the cruiser Birmingham on a patrol mission in the Skagerrak between Sweden and Germany when she was diverted to hunt for an enemy submarine. While trying to locate this submarine an aircraft sighting report of an enemy force of four minelayers, three destroyers and one torpedo boat was received, Mountbatten immediately ordered a high speed return at 32 knots, together with the Kandahar to the Birmingham. The two destroyers were joined by HMS Bulldog, a "B" Class destroyer, despatched by her own flotilla to deal with a floating mine. At 2052 hrs a Dornier reconnaissance aircraft was reported and fire was opened. At this point visibility was fairly good to the east and very good to the west but hazy to the north. At about 2230 hrs the visibility became very bad, a bank of mist having formed.

At 2244 hrs a blurred object was sighted on the port beam in the mist, and almost simultaneously, the track of a torpedo was seen to pass under the bridge. After a delay the torpedo exploded and the ship took on a list of 12/13 degrees to starboard. She had been attacked and torpedoed amidships by German E-boat S 31 (Oberleutnant zur See Hermann Opdenhoff). The E-boat was undoubtedly directed to an attacking position by W/T from the Dornier and had used the mist bank to make its approach.

Wallowing to starboard badly damaged and taking on a lot of water what immediately followed was a superb example of damage control and limitation by Mountbatten and his crew. The discussions with the ship's designer, A.P.Cole and his knowledge of ship design, potential battle damage and the inclusion of a longitudinal bulkhead, now came to Mountbatten's aid. As much superfluous top weigh, such as torpedoes was jettisoned and counter flooding carried out. Once the ship was stabilised the Bulldog attached a towing line and proceeded at 6 knots, all within one hour of the torpedo strike.

At 0010 hrs on 10 May 1940 powerful engine noise was heard and a large white MTB appeared out of the fog and rammed the Bulldog's starboard quarter. The MTB then opened fire with machine guns but she was obviously out of control as she then rammed the Kelly at the break of the forecastle and charged down the Kelly's starboard side, carrying away the whaler, motor boat and motor boat davits, and knocking down guard-rails and the starboard torpedo davit overboard.

The MTB left behind some parts of her hull and a large clip of ammunition. She then disappeared into the fog and her engine was heard to splutter then die out but she was not seen again. A second E-boat was heard approaching but did not make contact with the Kelly due to the fog.

HMS Kelly – Damaged and Wallowing, North Sea, 10 May 1940

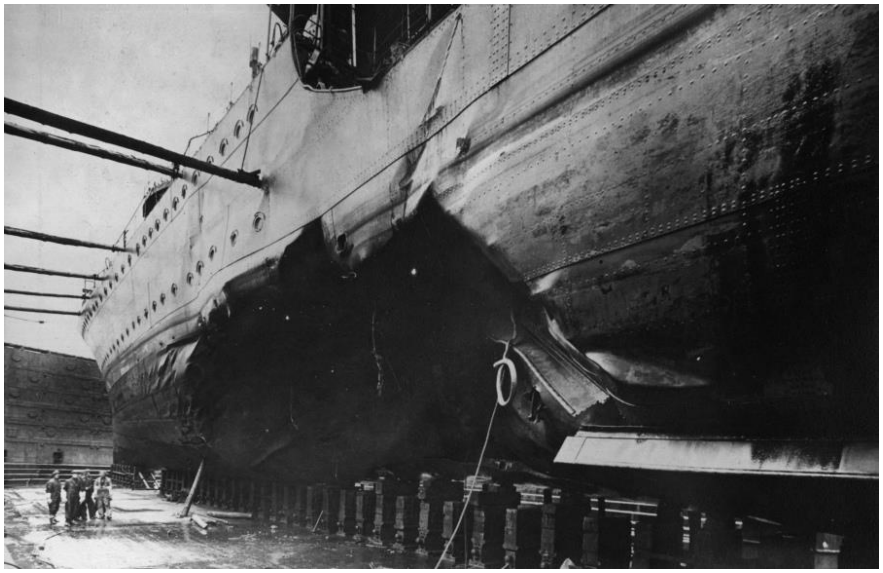
At 0310hrs HMS Kandahar approached the Kelly to give close escort and at 0430 hrs Mountbatten stop the tow, allowing Kandahar to lay her starboard quarter alongside Kelly in order for Kelly to transfer her wounded and those crewmen, mainly engine room and wireless department personnel, who would not be required to fight the ship, since all machinery was out of action. With no lighting or heating, a shortage of water and with the sickbay wrecked, Kelly was unable to attend to her more seriously wounded crew members. Twenty seven members of Kelly's crew had been killed in the torpedo attack. During the transfer the first German aircraft appeared and all guns on the three ships were in action as the wounded were transferred.

An air escort of three RAF Hudson's arrived just in time to drive off the German aircraft. A short time later the Birmingham and her escorting destroyers joined to provide additional escort but departed after several hours. Kelly, under tow again by Bulldog was left with a close escort of Kandahar and destroyers HMS Fury and HMS Gallant.

For the next four days she and her escorts were attacked constantly by E-boats and bombers as, at three knots, she struggled to get back to port safely. Finally, after 91 hours under tow, HMS Kelly reached the Tyne and safety, and returned to Hawthorn Leslie's dry dock which she had so recently vacated.

HMS Kelly entering the Tyne 13th May 1940 after 91 hours under tow

After undergoing extensive repairs at Hawthorn Leslie, Kelly re-joined the Fifth Flotilla later in 1940 and, after carrying out sea trials, sailed for the Mediterranean, arriving at Malta in April 1941.



HMS Kelly in dry dock showing extensive torpedo damage

Further details of hull and upper deck damage, HMS Kelly in Hawthorn Leslie's dry dock

HMS Kelly – Casualties 9/10 May 1940

HMS Kelly – Burial Plot and Memorial

Secret

APPENDIX NO. V to CAPTAIN (D) 5 No. 0320N. of 20th May, 1940.

LIST OF KILLED AND WOUNDED OF H.M.S. KELLY.

Killed.

Tel. C.H. Prescott	SSx.21033.	Sto. C.J. Mower	Kx. 96389.
O. Tel. G. Fowler	Jx.156121.	A/Yeo. F.A. Kingsley	Jx.135719.
A.B. A.D. Mires	Jx.149734.	Ldg. Sig. A. Amos	Jx.153763.
A.B. L. Pridmore	Jx.151116.	Ldg. Sig. W.J. Boxer	SSx.14139.
E.R.A. E.F. Waghorn	M.27306.	A/P.O.Tel. E. Wilkinson	Jx.134525.
S.P.O. A.W. Charman	K.64350.	A/P.O.Tel. P. Camps	Jx.133609.
S.P.O. H.C. Peckham	K.64209.	A/L. Tel. H. Edwards	Jx.139474.
S.P.O. J.W. Dixon	K.62294.	Ldg. Tel. A.W. Palmer	J. 110638.
S.P.O. W.S. Clarke	K.63240.	Tel. H.C. Pickering	SSx.15941.
Ldg. Sto. D. Kay	Kx.84981.	Tel. T.P. Allen	J. 69915.
Ldg. Sto. V. Gough	K.61950.	Boy E.W. Bethell	Jx.157774.
Sto. J. Johnson	Kx100380.	A.B. H.L. Young	Jx.152921.
Sto. W.J. Jenkins	Kx.89354.	Sto. W.J. Cave	Kx. 90867.
Ldg. Tel.L.F.Richardson	CJx136021		

Wounded.

Cook Z.N.A. Hudson	Mx. 56400.	Burns upper part of body including arms. Incise wound calf right leg with protusion of muscle. ?Fractured right ankle. Shock.
Sto. R.G. Foord	Kx. 84848.	Burns head and face, both arms, both legs. Shock.
Sto. H.D. Gill	Kx. 90975.	Burns both arms and face, and fractured right ankle.
Ldg. Sto. J. Oakley	Kx. 79963.	Burns both arms, face, head and left leg. Shock.
Ldg. Sto. W.H. Banks	K. 66725.	Burns both arms, bruising left hip, injury to head.
P.O. Wtr. R. Knight	Mx. 48530.	Burns both arms and face. Shock.
Tel. E.P. Parnell	Jx.141992.	Burns both arms, face, torso. Wrenched left shoulder. Incised wound right knee. Injury right ankle. Shock.
Ldg. Sea. J. Boyd	J. 114083.	Potts fracture left ?ditto right.
Shwrt. J. Wathen	Mx. 47054.	Incised wound scalp, broken nose.
A.B. E. Cash	SSx. 19876.	Internal derangement left knee.
Sig. S.W. Hunter	Jx.140754.	Derangement right knee.
C.P.O. W.R. Barden	J. 89841.	Incised wound outer border left eye.
L.S.A. G.O. Weller	Mx. 53465.	Derangement left knee, severe sprain right ankle.
A.B. G. Sadd	Jx.149229.	Incised wound forehead.
O. Sea. C.W. Reid	Jx.157441.	Incised wound upper lip.
A.B. K.J. Powell	Jx.139662.	Incised wound upper lip.
C.P.O. W. Stewart	J. 92136.	Strained back, ?fractured rib.
Ch.Sto. A.Scholfield	Kx. 91010.	Burn right hand.
C.E.A. A.G. Leach,	Mx. 46589.	Pain chest, fractured rib.
A.B. W.J. Lawlor,	SSx. 15132.	Exhaustion.
Com. Eng. W.E. Cole	.....	Burns both hands and arms.

HMS Kelly – List of Killed and Wounded (Captain (D) Report)

HMS Kelly – Postscript

HMS Kelly, commanded by Captain Lord Louis Mountbatten, great grandson of Queen Victoria, was sunk at 0800 hrs 23 May 1941 by German dive bombers shortly after carrying out a shore bombardment in support of British troops defending the island of Crete.

During an HMS Kelly reunion (the subject of a TV documentary), held at the Kelly public house in Hebburn during the early 1970s, Lord Mountbatten, reminiscing about the Kelly's final battle, told the tale of how as the ship took her final plunge, he was sucked down with her but somehow managed to fight his way back to the surface. When he broke surface, gasping for air, covered in oil, one of his fellow survivors, whom Mountbatten indicated was sitting very close to him at the reunion, remarked to him "isn't it funny how the shit always comes to the surfaces at times like this"! The man, a CPO, covered in oil himself, recognised Mountbatten but more to the point Mountbatten recognised him!

HMS Kelly – Appendices

Royal Navy Damage Control

It is clear that insufficient attention had been paid to damage control in the Navy between the wars by both designers and operators. A damage control school was set up only after the totally unnecessary loss of the aircraft carrier HMS Ark Royal off Gibraltar and training prior to that was very limited and sometimes even wrong. There were too few items such as diesel generators, portable pumps, emergency lighting and breathing apparatus nor were the crews adequately trained in the use of the equipment that was available.

Accounts of damage control frequently refer to shoring up the bulkhead as the first step but there are very few cases of bulkheads collapsing as they were tested to a head of water greater than that they were likely to be exposed to.

An exception to the usual poor damage control was HMS Kelly following her torpedoing in the Skagerrak in May 1940. Mountbatten had been closely involved with both the design and build of the ship and he had discussed the likely effects of damage and what remedial action to take with the designer A.P.Cole. Because of the damage from the torpedo and the extensive flooding that ensued, Kelly had lost all initial stability and she was lolling – not listing – away from the hole. An attempt to correct the heel by shifting weight to the high side would have been fatal. As a result of what he had learnt from Cole, Mountbatten realised he had to jettison top weight and he had previously prepared lists of equipment to ditch beginning with the torpedoes. Coles design, the longitudinal bulkhead, Mountbatten's damage control and a touch of luck saved the Kelly.

Royal Navy Anti-Aircraft Defence in the Second World War

The evolving threat from first airships and then aircraft against ships was recognised even before the outbreak of the Great War by the mounting of an increasing number and size of anti-aircraft weapons during the war. Although no large warship was lost to air attack, the potential was obvious. Post war analysis showed that AA weapons, relying on "eye shooting", required 3000 to 4000 rounds to bring down a single aircraft.

After the First World War the debate about air attack on ships became a very heated – and often ill-informed – controversy. The proponents of air power claimed that battleships were highly vulnerable to attack by new and ever larger bombers and therefore obsolete. The staged and bungled trials carried out by Billy Mitchell against the moored and disarmed ex German battleship OstFriesland in 1921 is an extreme case.

A more correct lesson of the Ostfriesland trial and of British trials was that it was very difficult to hit a ship, even when stationary and unarmed. The Royal Navy carried out many trials in respect to the AA defence of ships in the 1920s involving stabilised sights, gyros, servomechanisms and control theory but these systems were all in their infancy at the time.

The main threat at this time was perceived to be level bombing and although the RAF was aware of the potential of the dive bomber, they advised that this form of attack was difficult by anything but a purpose built aircraft of little value for anything else and the lifting power of contemporary aircraft was limited to small bombs.

There was a major review of AA systems in 1931 by the Naval Anti-Aircraft Gunnery Committee in 1931, with the RAF being represented by a squadron leader, a very junior officer, which was an indication as to how seriously the air marshals took the problem. Consequently, as it takes about ten years to develop a weapons system, the Royal Navy fought the early years of the Second World War with systems planned about 1930.

The 1931 committee made specific recommendations predicated on the belief that the main threat would be level bombing by high flying aircraft formations. This had considerable influence on the AA defence of the fleet and destroyers in particular. Because it was considered that the main focus of attack would be against the major units of the fleet, it was thought that destroyers would only be secondary targets. Hence, destroyers would "contribute to the AA defence of the fleet as a whole and not specifically themselves". This lead to their long range guns having an elevation of not more than 40deg and "because of the difficulty in the loading of dual purpose guns, future destroyers should not be fitted with a dual purpose armament". The main purpose of a destroyer's main guns was to break-up attacking formations at long range as single attacking aircraft at high altitude were unlikely to score hits.

The Navy was slow to appreciate the deficiencies in AA defence as aircraft performance improved during the 1930s and there is no doubt that the Navy's AAW capability was inferior to that of the US navy, the Kriegsmarine and the Imperial Japanese Navy during the early years of the war but the operational significance of this should not be exaggerated. Against modern monocogue, all-metal monoplanes, even the best systems struggled to shoot them down until the introduction of the proximity fuse.

The major cause of the inferiority of the Royal Navy's AAW provisions would, on hindsight, appear to be the opposite of the reactionary RN attitude so often blamed. The 1931 committee was a little early and just two years later, the threat of the dive bomber and the weakness of the Navy's defence against it would have been recognised. Air attacks of the type postulated by the RAF in 1931 were, in the event, countered quite well by the AA systems of the Royal Navy. These systems were, however, of little utility against the Luftwaffe's dive bombers.

Article by Dave Bourn

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